

Claims

1. A light regulation device having
 - at least one light sensor (10), which provides an actual value for the brightness at its output,
 - at least one regulator (22a to 22d), to which a desired value for the brightness can be supplied, in addition to this actual value,
 - a number n of output connections (24a to 24d), where n is greater than or equal to two, each output connection (24a to 24d) being coupled to the output of a regulator (22a to 22d) for the purpose of changing the luminous flux which can be supplied in each case to at least one luminous means (18a to 18d),the regulator (22a to 22d) being designed to determine a difference between the desired value and the actual value and to check whether this difference is within or outside a predeterminable tolerance range and, for the case in which the difference is outside the tolerance range, to change the luminous flux of the luminous means (18a to 18d), which can be connected to the n output connections (24a to 24d), in a corresponding manner;
characterized in that at least one limit of the tolerance range depends on the present value for the luminous flux.
2. The device as claimed in claim 1, characterized in that the upper and/or the lower limit of the tolerance range depend on the present value for the luminous flux.
3. The device as claimed in claim 1 or 2, characterized in that a desired value line is arranged within the tolerance range.
4. The device as claimed in claim 3, characterized in that the at least one regulator (22a to 22d) is designed to end the regulation only when the desired value line has been reached.

5. The device as claimed in claim 3 or 4, characterized in that the desired value line comes closer to the upper limit of the tolerance range the lower the value for the luminous flux.

6. The device as claimed in claim 5, characterized in that the desired value line touches the upper limit of the tolerance range at the minimum value for the luminous flux.

7. The device as claimed in one of the preceding claims, characterized in that the desired value line comes closer to the lower limit of the tolerance range the higher the value for the luminous flux.

8. The device as claimed in claim 7, characterized in that the desired value line touches the lower limit of the tolerance range at the maximum value for the luminous flux.

9. The device as claimed in one of the preceding claims, characterized in that a regulator (22a to 22d) is associated with each output connection (24a to 24d).

10. The device as claimed in claim 9, characterized in that each regulator (22a to 22d) is arranged in an electric ballast (20a to 20d).

11. The device as claimed in claim 8 or 9, characterized in that a store is associated with each regulator (22a to 22d), in which store a characteristic and/or a family of characteristics is stored which has an associated luminous means (18a to 18d), in particular for the purpose of establishing the regulation response and/or establishing the form of the tolerance range.

12. The device as claimed in claim 11, characterized in that the regulation response comprises, as a parameter, a predeterminable value for the luminous flux depending on the determined difference between the desired value and the actual value and/or the regulation speed.

13. The device as claimed in one of the preceding claims, characterized in that it is designed to carry out the change in the luminous flux in predeterminable dimming increments, the number of dimming increments being limited to a predeterminable value within the tolerance range.

14. The device as claimed in claim 13, characterized in that it is designed to interrupt the regulation once the predeterminable number of dimming increments has been reached.